

Amendment to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) First and second feedback equalizer signals for controlling a decision feedback equalizer, wherein the first feedback equalizer signal is supplied as output from a first feedback loop and is delayed by an implementation delay and wherein the second feedback equalizer signal is supplied as output from a second feedback loop and is free of the implementation delay, wherein said first and second feedback loops process decisions from a decision device common to both of said first and second loops.

2. (Original) A decision feedback equalizer (DFE), comprising: a forward equalizer; first and second adders; a decision device; a feedback equalizer; and an N-tap filter, wherein: the first and second adders, the decision device and the feedback equalizer constitute a first feedback loop; the second adder, the decision device, and the N-tap filter constitute a second feedback loop; the second feedback loop is free of an implementation delay associated with the first feedback loop; and N is a positive integer .

3. (Original) The DFE as recited in claim 2, wherein the N-tap filter is implemented in fast logic.

4. (Original) A digital television receiver including the DFE as recited in claim 2.

5. (Currently Amended) A decision feedback equalizer (DFE), comprising: a forward equalizer; a decision device; filter means for generating a first feedback signal responsive to first filter coefficients ~~adapted~~ optimized to process postcursor echoes adjacent to ~~the~~ a main channel and a second feedback signal responsive to second filter coefficients ~~adapted~~ optimized to process all other postcursor echoes; and means for applying the first and second feedback signals to thereby control the DFE.

6. (Original) The DFE as recited in claim 5, wherein the number of second filter coefficients is much greater than the number of first filter coefficients.

7. (Original) A digital television receiver including the DFE as recited in claim 5.

8. (Currently Amended) A method for controlling a decision feedback equalizer (DFE) including a forward equalizer and a decision device, comprising: generating a first feedback signal responsive to first filter coefficients ~~adapted~~ optimized to process postcursor echoes adjacent to ~~the~~ a main channel; generating a second feedback signal responsive to second filter coefficients ~~adapted~~ optimized to process all other postcursor echoes; and applying the first and second feedback signals to thereby control the DFE.

9. (Original) The method as recited in claim 8, wherein: the decision device is

common to first and second feedback loops; and the applying step further comprises:
applying the first and second feedback signals to the first and second feedback loops,
respectively, to thereby control the DFE.